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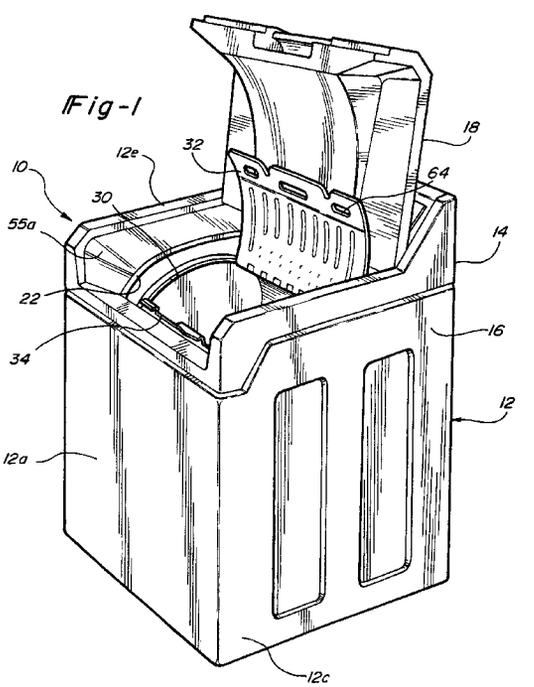
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(54) System for automatically opening basket doors of top-loading, horizontal axis, automatic washer

(57) A system for automatically opening basket doors (32,34) of an automatic washer (10). The automatic washer includes an enclosure (12) having an opening provided with a lid (18) hingedly connected to the enclosure for selectively covering the enclosure opening. An imperforate tub (20) disposed within the enclosure surrounds a rotatable perforate wash basket (28) having an opening (30) for accessing the interior of the basket. A first door flap (32) having an engagement opening (64) and a second door flap (34) having a catch portion (66,68) extending therefrom are provided being hingedly mounted on opposite rims of the basket opening and being biased toward their open position and further being adapted to partially overlap one another in a closed position such that the catch portion (66,68) engages the engagement opening (64) for locking the first door flap and the second door flap in a closed position. A tab (63) extends from the second door flap (34) generally opposite the main portion of the second door flap beyond the hinged connection with the basket. A tab engagement arm (63) is disposed adjacent the basket for selectively engaging the tab for disengaging the second door flap from the first door flap. The tab engagement arm (63) is interconnected with the lid such that moving the lid (18) from a closed position to an open position causes the tab engagement arm to disengage the respective door flaps.



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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 2954

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X Y	DE-A-33 46 427 (MIELE & CIE GMBH & CO) * the whole document * ---	1-5,7-9, 11-13, 19,20,24 6,28,29	D06F37/10 D06F39/14
A	EP-A-0 116 878 (INDUSTRIE ZANUSSI S.P.A.) * claims; figures * ---	7,8,12, 19,24	
D,Y	US-A-4 862 712 (W. HÜTTEMANN) * claim 1; figures * ---	6,28,29	
A	DE-A-30 48 072 (BOSCH-SIEMENS HAUSGERÄTE GMBH) * figures * ---	7,8,12, 19,24	
A	PATENT ABSTRACTS OF JAPAN vol. 13 no. 556 (C-664) ,11 December 1989 & JP-A-01 230390 (MITSUBISHI ELECTRIC CORP) 13 September 1989, * abstract * ---	1-4,6, 11,19,24	
A	PATENT ABSTRACTS OF JAPAN vol. 15 no. 38 (C-800) ,30 January 1991 & JP-A-02 274294 (KANSAI ELECTRIC POWER CO INC) 8 November 1990, * abstract * ---	1-4,6, 11,19,24	
X	DE-A-34 16 424 (SECO MASCHINENBAU GMBH & CO KG) * page 8, last paragraph - page 9, line 15 * ---	1,6	
X	DE-A-27 56 209 (BOSCH-SIEMENS HAUSGERÄTE GMBH) * page 7, line 1 - page 8, line 27 * --- -/--	1	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

D06F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12 February 1996	D Hulster, E

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE-A-24 18 667 (GEBR. POENSGEN GMBH) * page 6, paragraph 1 * ---	1	
A	GB-A-409 637 (N.V. MACHINEFABRIEK REINEVELD) ---		
A	DE-A-22 14 620 (SIEMENS-ELECTROGERÄTE GMBH) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)

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